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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,622

04/15/2004

Sean Allen Johnson

SVL920040562US2

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7590

11/21/2006

INTERNATIONAL BUSINESS MACHINES CORP

IP LAW

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SAN JOSE, CA 95141

EXAMINER

JOHNSON, JOHNESE T

ART UNIT

PAPER NUMBER

2169

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,622

Applicant(s)

JOHNSON ET AL.

Examiner

Johnese Johnson

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 and 45-46 is/are rejected.
- 7) ☒ Claim(s) 39-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/30/2006, 12/02/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: 12/01/2005.

DETAILED ACTION

Claim Objections

1. Claims 1-3, 8-13, 18, 23, 24, 27, and 34 are objected to because of the following informalities: unclear claim language.

Claims 2, 3, 10, and 11 recite the phrase “the at least one” which is grammatically unclear to the examiner because the examiner is not sure if applicant is referring to *a specific item OR at least one item from a group*. Appropriate correction is required.

Claims 1-3, 8, 9, 11-13, 18, 23, 24, 27, and 34 recite “and/or” which is unclear to the examiner because the examiner is not sure if both instances of the limitation or its alternative is to be included. Appropriate correction is required.

Claims 8 and 9 recite: “describe[ing] how”, which illustrate how the limitation is used. Claim should be amended to recite “wherein”.

Claim 23 recites: “allows”, which implies optionality of the system. Claim should be amended to recite “provides” or “employs”.

Claim 24 recites: “used to”, which implies intended use of the limitation. Claim should be amended to recite “to”.

Claims 24, 34, and 45 recite: “for”, which implies intended use of the limitation. Claim should be amended to recite “to”.

Claims 27 and 46 recite: “can”, which implies that the limitation is *capable* of and is optional. Claim should be amended to recite “will”.

Claim 46 recites: "so that" which implies intended use. Claim should be amended to recite "wherein".

Allowable Subject Matter

2. Claims 39-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims; and if applicant can overcome the claim objections cited.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 8, 9, 11-13, 18, 23, 24, 27, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite "and/or" which implies that the applicant is NOT making a distinction of whether it was his intention to include both instances of the limitation or its alternative which renders the claim indefinite.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 14, 24, and 34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The content of these claims is directed to software modules which are small sections of program code. Program code is also known as functional descriptive material (See *In re Warmerdam*, 33 F3d at 1360, 31 USPQ2d at 1759). Although the specification provides a definition of a system, it is not enough to consider the system a "computer". Therefore, the content is not structurally and functionally interrelated to a "computer-readable medium" thereby rendering it incapable of producing a useful, concrete and tangible result and is therefore, non-statutory.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Owen et al. (U.S. PG. Pub. No. 2006/0174132).

As to claim 1, Owen et al. disclose:

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A system for virtually organizing content, content organizing structures, work items, and/or work organizing structures from a plurality of disparate content repositories and/or workflow systems, the system comprising:
an application program interface (API) for interfacing with a software application
written to provide access to the system (see paragraph [0030], line 6); and
at least one virtual repository comprising a plurality of nodes that link to select items
from the plurality of content repositories and/or workflow systems and provide
organizational structure for the virtual repository (see paragraph [0030], lines 1-3;
wherein the virtual repository is comprised of content repositories, i.e. nodes).

As to claim 2, Owen et al. disclose:

wherein the content, content organizing structures, work items, and/or work organizing structures are not replicated or impacted by the creation of the at least one virtual repository (see paragraph [0031], line 6; wherein nodes “plug-in” to the virtual repository and therefore are not changed).

As to claim 3, Owen et al. disclose:

wherein the existing organization, functions, indexing, and security of the content, content organizing structures, work items, and/or work organizing structures are not impacted by the creation of the at least one virtual repository (see paragraph [0031], line 6; wherein nodes “plug-in” and nothing is affected).

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As to claim 4, Owen et al. disclose:

wherein the API is in a format selected from the group consisting of Java, Component Object Model (COM), Simple Object Protocol (SOAP) Web Services, Representational State Transfer (REST) Web Services, and Web Development Components (see paragraph [0030], lines 19-20).

As to claim 5, Owen et al. disclose:

a graphical user interface or a web-based interface (see paragraph [0047], line 4).

As to claim 6, Owen et al. disclose:

wherein the nodes are arranged in a parent-child hierarchy (see paragraph [0031], lines 10-15).

As to claim 7, Owen et al. disclose:

wherein each node is of the type selected from the group consisting of links to repository content, links to repository folders, links to workflow system work items, links to workflow system work queues, virtual folders, folders populated by saved repository or workflow system searches, and links to external resources via URLs (see paragraph [0029]).

As to claim 8, Owen et al. disclose:

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wherein the nodes contain meta-data properties in addition to the meta-data maintained in their respective underlying content repositories and/or workflow systems that describe how the select items are used in the virtual repository (see paragraph [0039], lines 1-3).

As to claim 9, Owen et al. disclose:

wherein the nodes have supplemental access control rules in addition to the access control rules maintained in their respective underlying content repositories and/or workflow systems, describing how the select items are secured in the virtual repository (see paragraph [0031], line 6; wherein access is controlled via the SPI).

As to claim 11, Owen et al. disclose:

comprising a middleware platform to abstract the plurality of content repositories and/or workflow systems used in the at least one virtual repository (see paragraph [0033], line 9; wherein the SPI communicates with the repositories via a communications layer or middleware).

8. Claims 14-16 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. (U.S. PG. Pug. No. 2002/0152210).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 14, Johnson et al. disclose:

A system for providing access to workflow in a plurality of disparate workflow systems having a plurality of proprietary program interfaces, the system comprising:

an application program interface (API) for interfacing with a software application written to provide access to the system (see paragraph [0021], line 3);

an access services component that relays requests to access workflow items in the plurality of workflow systems from the API to a plurality of bridges (see paragraph [0021], line 3); and

a plurality of bridges that translate user requests into requests understandable by the proprietary program interfaces of the plurality of disparate workflow systems (see paragraph [0021], line 5).

As to claim 15, Johnson et al. disclose:

wherein the API is in a format selected from the group consisting of Java, Component Object Model (COM), Simple Object Protocol (SOAP) Web Services, Representational State Transfer (REST) Web Services, and Web Development Components (see paragraph [0023], line 7).

As to claim 16, Johnson et al. disclose:

further comprising a graphical user interface or a web-based interface (see paragraph [0026], GUI or web based interface to input data).

As to claim 18, Johnson et al. disclose:

wherein the access services component maps workflow meta-data properties across the plurality of workflow systems to a single common meta-data property by mapping the name, data type of the property and/or value transformation of the meta-data (see paragraph [0036]).

As to claim 19, Johnson et al. disclose:

further comprising an exchange services server that enables import and export of workflow items and meta-data properties in the plurality of workflow systems (see Abstract, line 14).

As to claim 20, Johnson et al. disclose:

wherein a single bridge corresponds to a single workflow system (see fig. 2 items 108₁ and 110₁; wherein a single bridge is mapped to a single repository).

As to claim 21, Johnson et al. disclose:

further comprising a bridge factory that is configured to generate a new bridge to support each new workflow system (see paragraph [0010], line 4).

As to claim 22, Johnson et al. disclose:

wherein each bridge accesses the underlying workflow system via a mode selected from the group consisting of Java, Component Object Model (COM), Java Native Interface (JNI) or Simple Object Access Protocol (SOAP) Web Services (see paragraph [0010], lines 11-14).

9. Claims 24-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Ghoneimy et al. (U.S. PG. Pub. No. 2004/0078373).

As to claim 24, Ghoneimy et al. disclose:

A system for creating rich relationships between two or more pieces of content, content organizing structures, work items and/or work organizing structures that exist in a plurality of content repositories, workflow systems and/or other external information sources, the system comprising an application program interface (API) for interfacing with a software application written to provide access to the system

wherein a system of nodes (see paragraph [0070]), members (see paragraph [0072], lines 29-30), and associations (relationships among nodes) is used to describe the relationships between the two or more pieces of content, content organizing structures, work items and/or work organizing structures.

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As to claim 25, Ghoneimy et al. disclose:

wherein the API is in a format selected from the group consisting of Java, Component Object Model (COM), Simple Object Protocol (SOAP) Web Services, Representational State Transfer (REST) Web Services, and Web Development Components (see paragraph [0201], line 1).

As to claim 26, Ghoneimy et al. disclose:

further comprising a graphical user interface or a web-based interface (see paragraph [0028], lines 12-14).

As to claim 27, Ghoneimy et al. disclose:

wherein nodes represent content, content organizing structures, work items and/or work organizing structures that can participate in relationships with information selected from the group consisting of meta-data describing the node, roles played in associations with other nodes, 0 or more scoped names, a unique identifier of the subject of the node, a locator of the external subject of the node, and 0 or more node types (see paragraph [0070], lines 1-3).

10. Claims 34-37 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Zintel et al. (U.S. PG. Pub. No. 2002/0029256).

As to claim 34, Zintel et al. disclose:

A system for providing for notification of one or more event handlers when

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additions, changes or deletions occur to any subscribed to content, content organizing structures, content repository searches, federated content repository searches, work items, work organizing structures, workflow system searches and/or federated workflow system searches that exist in a plurality of content repositories, workflow systems and/or other external information sources and comprising:

an application program interface (API) for interfacing with a software application written to provide access to the system (see paragraph [0209], line 1); and subscriptions to content, content organizing structures, content repository searches, federated content repository searches, work items, work organizing structures, workflow system searches and/or federated workflow system searches (see paragraph [0142]);

wherein the subscriptions are requests to track when additions, changes or deletions occur to any subscribed to content, content organizing structures, content repository searches, federated content repository searches, work items, work organizing structures, workflow system searches and/or federated workflow system searches (see paragraph [0142]).

As to claim 35, Zintel et al. disclose:

wherein the subscriptions are stored with information selected from the group consisting of meta-data describing the subscription, stored and encrypted user credentials to be

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used when later detecting change of the subscribed item, stored state representation of the item from the last time it was monitored for change, with an XML version of the stored state representation, and with membership in a logical subscription group (see paragraphs [0276] and [0301]).

As to claim 36, Zintel et al. disclose:

wherein the API is in a format selected from the group consisting of Java, Component Object Model (COM), Simple Object Protocol (SOAP) Web Services, Representational State Transfer (REST) Web Services, and Web Development Components (see paragraph [0280]; wherein the API interacts with GENA and is built on SOAP [0608]).

As to claim 37, Zintel et al. disclose:

further comprising a graphical user interface or a web-based interface (see paragraph [0549], line 9 - GUI).

As to claim 46, Zintel et al. discloses:

wherein an event is created when a change is detected with the subscription for the event, meta-data describing the event, an event path the event will follow, and an open schema so that content repositories or workflow systems with internally defined event mechanisms can post events to the federated event system without polling for change. (see paragraph [0142], lines 6-9; wherein an event is created when a change occurs in the DST).

Claim Rejections - 35 USC § 103

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over Owen et al. (U.S. PG. Pub. No. 2006/0174132) and in view of Johnson et al. (U.S. PG. Pug. No. 2002/0152210).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

As to claim 10, Owen et al. does not explicitly disclose:

wherein the at least one virtual repository can be exported to an XML representation
and imported from the same XML representation.

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However, Johnson et al. disclose:

wherein the at least one virtual repository can be exported to an XML representation
and imported from the same XML representation (see paragraph [0036]).

It would have been obvious, at the time of the invention, having teachings of
Owen et al. and Johnson et al. before him/her, to combine the features as disclosed by
Owen et al. with the features as disclosed by Johnson et al. to provide real-time
exchange of content stored in multiple content repositories (see Johnson et al.,
paragraph [007], lines 5-7).

12. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Owen et al. (U.S. PG. Pub. No. 2006/0174132) and in view of Michaelides (U.S.
Pub. No. 2004/0181753).

As to claim 12, Owen et al. does not explicitly disclose:

further comprising a set of adaptors to allow the system to access specific content
repositories and/or workflow systems.

However, Michaelides discloses:

further comprising a set of adaptors to allow the system to access specific content
repositories and/or workflow systems (see paragraph [0004, line 4 – set of
adaptors for applications]).

It would have been obvious, at the time of the invention, having teachings of
Owen et al. and Michaelides before him/her, to combine the features as disclosed by

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Owen et al. with the features as disclosed by Michaelides to facilitate integration between applications, systems, and processes (see Michaelides, paragraph [0002], lines 4-5).

As to claim 13, Owen et al. does not explicitly disclose:

further comprising an adaptor toolkit that enables the system to build interfaces to future developed content repositories and/or workflow systems.

However, Michaelides discloses:

further comprising an adaptor toolkit that enables the system to build interfaces to future developed content repositories and/or workflow systems (see paragraph [0004], lines 10-11).

It would have been obvious, at the time of the invention, having teachings of Owen et al. and Michaelides before him/her, to combine the features as disclosed by Owen et al. with the features as disclosed by Michaelides to facilitate integration between applications, systems, and processes (see Michaelides, paragraph [0002], lines 4-5).

13. Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (U.S. PG. Pug. No. 2002/0152210) and in view of Ghoneimy et al. (U.S. PG. Pub. No. 2004/0078373).

As to claim 17, Johnson et al. do not explicitly disclose:

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further comprising a universal in-box that presents to the user the work items from the plurality of workflow systems intended for that single user based on the users' identity, role membership and group membership in each workflow system of the plurality of workflow systems.

However, Ghoneimy et al. disclose:

further comprising a universal in-box that presents to the user the work items from the plurality of workflow systems intended for that single user based on the users' identity, role membership and group membership in each workflow system of the plurality of workflow systems (see paragraph [0051], lines 4-13).

It would have been obvious, at the time of the invention, having teachings of Johnson et al. and Ghoneimy et al. before him/her, to combine the features as disclosed by Johnson et al. with the features as disclosed by Ghoneimy et al. to facilitate interaction between clients and the workflow elements (see Ghoneimy et al. paragraph [0051], lines 1-2).

As to claim 23, Johnson et al. do not explicitly disclose:

further comprising a universal workflow item attachment function that allows content, folders and/or work items from any other content repository and/or workflow system to be attached to a work item.

However, Ghoneimy et al. disclose:

further comprising a universal workflow item attachment function that allows content, folders and/or work items from any other content repository and/or workflow

system to be attached to a work item (see paragraph [0041], lines 10-12).

It would have been obvious, at the time of the invention, having teachings of Johnson et al. and Ghoneimy et al. before him/her, to combine the features as disclosed by Johnson et al. with the features as disclosed by Ghoneimy et al. to facilitate the automation of work processes (see Ghoneimy et al. paragraph [0008], lines 1-2).

14. Claims 28 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghoneimy et al. (U.S. PG. Pub. No. 2004/0078373) and in view of Brunner et al. (U.S. Pat. No. 5,550,971).

As to claim 28, Ghoneimy et al. do not explicitly disclose:

wherein an association represents a relationship between two or more nodes

However, Brunner et al. disclose:

wherein an association represents a relationship between two or more nodes (see claim 15; wherein nodes correspond to entities that have relationships).

It would have been obvious, at the time of the invention, having teachings of Ghoneimy et al. and Brunner et al. before him/her, to combine the features as disclosed by Ghoneimy et al. with the features as disclosed by Brunner et al. to facilitate the generation of a user interface that is adaptable to various database systems (see Brunner et al. col. 2, lines 46-48).

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As to claim 29, Ghoneimy et al. do not explicitly disclose:

wherein an association has two or more members which are nodes playing a specific
named role in the association.

However, Brunner et al. disclose:

wherein an association has two or more members which are nodes playing a specific
named role in the association (see col. 21, lines 60-61; wherein the nodes
correspond to entities and an entity has a role).

It would have been obvious, at the time of the invention, having teachings of
Ghoneimy et al. and Brunner et al. before him/her, to combine the features as
disclosed by Ghoneimy et al. with the features as disclosed by Brunner et al. to
facilitate the generation of a user interface that is adaptable to various database
systems (see Brunner et al. , col. 2, lines 46-48).

As to claim 30, Ghoneimy et al. do not explicitly disclose:

wherein members represent the specific role a node plays in an association.

However, Brunner et al. disclose:

wherein members represent the specific role a node plays in an association (see
Abstract, lines 10-12; wherein the nodes belonging to the association have a
relationship and specific roles in that relationship).

It would have been obvious, at the time of the invention, having teachings of
Ghoneimy et al. and Brunner et al. before him/her, to combine the features as
disclosed by Ghoneimy et al. with the features as disclosed by Brunner et al. to

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facilitate the generation of a user interface that is adaptable to various database systems (see Brunner et al., col. 2, lines 46-48).

As to claim 31, Ghoneimy et al. do not explicitly disclose:

wherein members have a player specifying the node playing the role in the association.

However, Brunner et al. disclose:

wherein members have a player specifying the node playing the role in the association
(see claim 15; wherein relationships comprise members of nodes and their roles).

It would have been obvious, at the time of the invention, having teachings of Ghoneimy et al. and Brunner et al. before him/her, to combine the features as disclosed by Ghoneimy et al. with the features as disclosed by Brunner et al. to facilitate the generation of a user interface that is adaptable to various database systems (see Brunner et al., col. 2, lines 46-48).

As to claim 32, Ghoneimy et al. do not explicitly disclose:

wherein associations can have 0 or more association types, wherein the association types have logical properties about the type of the relationship and are selected from the group consisting of allowed cardinality of the relationship, allowed members of the relationship, required members of the relationship, transitivity of the relationship, delete propagation across the relationship, and save propagation across the relationship.

However, Brunner et al. disclose:

wherein associations can have 0 or more association types, wherein the association types have logical properties about the type of the relationship and are selected from the group consisting of allowed cardinality of the relationship, allowed members of the relationship, required members of the relationship, transitivity of the relationship, delete propagation across the relationship, and save propagation across the relationship (see col. 5, lines 66-67 and col. 6, line 1 - 3).

It would have been obvious, at the time of the invention, having teachings of Ghoneimy et al. and Brunner et al. before him/her, to combine the features as disclosed by Ghoneimy et al. with the features as disclosed by Brunner et al. to facilitate the generation of a user interface that is adaptable to various database systems (see Brunner et al., col. 2, lines 46-48).

15. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghoneimy et al. (U.S. PG. Pub. No. 2004/0078373) and in view of Evans (U.S. PG. Pub. No. 2004/0078340).

As to claim 33, Ghoneimy et al. do not explicitly disclose:

further comprising locators to reference and de-reference entities external to the system, the locators being selected from the group consisting of a locator for external references that leverages content integration middleware to reference content or content organizing structures from one of a plurality of content repositories, a locator for external references that leverages workflow integration

middleware to reference work items or work organizing structures from one of a plurality of workflow systems, and an extensible locator interface to enable locators for any external system

However, Evans discloses:

further comprising locators to reference and de-reference entities external to the system, the locators being selected from the group consisting of a locator for external references that leverages content integration middleware to reference content or content organizing structures from one of a plurality of content repositories, a locator for external references that leverages workflow integration middleware to reference work items or work organizing structures from one of a plurality of workflow systems, and an extensible locator interface to enable locators for any external system (see paragraph [0131]; wherein the document is accessed via URL and leverages the message queuing middleware to format the message).

It would have been obvious, at the time of the invention, having teachings of Ghoneimy et al. and Evans before him/her, to combine the features as disclosed by Ghoneimy et al. with the features as disclosed by Evans to allow communications to occur over a plurality of communications media and/or communications links, to increase the likelihood of successful and secure communication with and/or to one or more parties (see Evans, paragraph [0041]).

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16. Claims 38 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zintel et al. (U.S. PG. Pub. No. 2002/0029256) and in view of Mobley et al. (U.S. Pat. No. 5,708,963).

As to claim 38, Zintel et al. do not explicitly disclose:

wherein logical groups organize like subscriptions with a common polling interval for a group or with a common event path for a group

However, Mobley et al. disclose:

wherein logical groups organize like subscriptions with a common polling interval for a group or with a common event path for a group (see col. 13, lines 40-43).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Mobley et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Mobley et al. to provide an efficient, reliable return path for returning data from a subscriber location to a service originator in a direct-to-home subscription information delivery service system (see Mobley et al. col. 6, lines 22-25).

As to claim 45, Zintel et al. do not explicitly disclose:

further comprising a statistics module for gathering runtime statistics on events passing through each step of an event path and displaying said statistics.

However, Mobley et al. disclose:

further comprising a statistics module for gathering runtime statistics on events passing

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through each step of an event path and displaying said statistics (see col. 11, lines 60-62; wherein the decoder has a statistics module).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Mobley et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Mobley et al. to provide an efficient, reliable return path for returning data from a subscriber location to a service originator in a direct-to-home subscription information delivery service system (see Mobley et al. col. 6, lines 22-25).

17. Claims 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zintel et al. (U.S. PG. Pub. No. 2002/0029256) and in view of Armstrong et al. (U.S. Pat. No. 6, 279, 046).

As to claim 39, Zintel et al. , do not explicitly disclose:

an event path defined per logical group comprising a timer, group processor, content monitor, event filter and event handler components

However, Armstrong et al. discloses:

an event path defined per logical group comprising a timer, group processor, content monitor, event filter and event handler components (see col. 8, line 41).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-

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driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

As to claim 40, Zintel et al., do not explicitly disclose:

wherein the timer initiates periodic polling of content repositories and workflow systems for change that needs notification.

However, Armstrong et al. discloses:

wherein the timer initiates periodic polling of content repositories and workflow systems for change that needs notification (see col. 11, lines 61-65).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

As to claim 41, Zintel et al., do not explicitly disclose:

wherein the group processor initiates events on eligible subscriptions in a subscription group.

However, Armstrong et al. discloses:

wherein the group processor initiates events on eligible subscriptions in a subscription group (see col. 11, lines 59-61).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed

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by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

As to claim 42, Zintel et al. , do not explicitly disclose:

wherein the content monitor comprises a plug-in module for detecting change in monitored items.

However, Armstrong et al. discloses:

wherein the content monitor comprises a plug-in module for detecting change in monitored items (see col. 8, lines 5-10; wherein changes are tracked).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

As to claim 43, Zintel et al. , do not explicitly disclose:

wherein the event filter comprises plug-in modules for filtering interesting and uninteresting changes in monitored items.

However, Armstrong et al. discloses:

wherein the event filter comprises plug-in modules for filtering interesting and uninteresting changes in monitored items (see col. 11, lines ; wherein the event

is processed before it reaches the target object (i.e. filtered by the filtering module).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

As to claim 44, Zintel et al., do not explicitly disclose:

wherein a subscription context is made available to event path plug-ins, content monitors, event filters, and event handlers with access selected from the group consisting of access to a live content integration middleware session, access to a live workflow integration middleware session, access to a statistics reporting API, access to an error reporting API, access to a logging API, and access to the active subscription for the plug-in

However, Armstrong et al. discloses:

wherein a subscription context is made available to event path plug-ins, content monitors, event filters, and event handlers with access selected from the group consisting of access to a live content integration middleware session, access to a live workflow integration middleware session, access to a statistics reporting API, access to an error reporting API, access to a logging API, and access to the active subscription for the plug-in (see col. 5, lines 65-67 - col. 6, line 1 and col.

7, lines 61-64; wherein an event handler sends an acknowledgement in the form of a subscription).

It would have been obvious, at the time of the invention, having teachings of Zintel et al. and Armstrong et al. before him/her, to combine the features as disclosed by Zintel et al. with the features as disclosed by Armstrong et al. to provide an event-driven communications interface to support communications between multiple logical partitions in a logically portioned computer (see Armstrong et al., col. 2, line 40-42).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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